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(54) Title: A METHOD FOR MANAGING NETWORKS BY ANALYZING CONNECTIVITY

(57) Abstract: A method is disclosed for determining the ability of a network to spread information or physical traffic. Said network includes a number of network nodes interconnected by links. The method comprises mapping the topology of a network, computing a value for link strength between the nodes, computing an Eigenvector Centrality index for all nodes, based on said link strength values identifying nodes which are local maxima of the Eigenvector Centrality index as centre nodes, grouping the nodes into regions surrounding each identified centre node, assigning a role to each node from its position in a region, as centre nodes, region member nodes, border nodes, bridge nodes, dangler nodes, and measuring the susceptibility of the network to spreading, based on the number of regions, their size, and how they are connected.



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